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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/844,801	04/27/2001	Masakazu Suzuki	125A 3110	2553

7590 04/06/2004  
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EXAMINER

SAX, STEVEN PAUL

ART UNIT PAPER NUMBER

2174

DATE MAILED: 04/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/844,801

Applicant(s)

SUZUKI ET AL.

Examiner

Steven P Sax

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-18,20,22,24-33,35 and 36 is/are allowed.
- 6) ☒ Claim(s) 19,21,23 and 34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

### DETAILED ACTION

1. This application has been examined.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 19, 21, 23, 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto (6677944) and Nishino (5623583) and Mochizuki (6263093).

4. Regarding claim 19, Yamamoto shows displaying three dimensional data as a combination of three sectional images of an X-section, Y-section, and Z-section (column 2 lines 14-35 and 50-57, column 4 lines 30-55, column 9 lines 15-27, column 13 lines 15-46, column 14 lines 30-45) by processing three dimensional data obtained by imaging (column 14 lines 15-30). Yamamoto does not specifically say that the sections orthogonalize each other, but does mention maximizing the utilization of section information to make the model. Furthermore, Nishino shows using orthogonal sections to each other (Nishino column 14 lines 30-46, column 10 lines 25-57 for example) to maximize utilization of the section information to make the model – orthogonal sections do

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not have any overlap of component information. It would have been obvious to a person with ordinary skill in the art to have the sections orthogonal to each other in Yamamoto, because it would maximize utilization of section information to make the model. Yamamoto shows preparing in advance sectional images of sections parallel to the X, Y, and Z sections by slicing data from the three dimensional data (Yamamoto column 13 lines 15-42, column 15 lines 13-43). Yamamoto does not necessarily show slicing the data at a predetermined interval, but does mention efficient obtaining of the data. Furthermore, Mochizuki shows efficient obtaining of the data by taking 'slices' at regular intervals (column 5 lines 40-67, column 6 lines 3-31, column 10 lines 14-47). It would have been obvious to a person with ordinary skill in the art to do this in Yamamoto, because it would allow efficient obtaining of the data. Yamamoto shows displaying as a list displaying mode a series of sectional images selected from the X, Y, Z images previously prepared (Figures 5, 26, 27, column 16 lines 30-44, column 17 lines 30-45, column 18 lines 55-66).

5. Claims 21, 23, and 34 show the same features as claim 19 and are rejected for the same reasons.


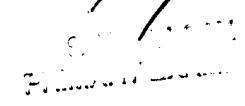
6. Claims 1-18, 20, 22, 24-33, 35-36 are allowable over the prior art of record. The additional features that sequentially change and display the sectional images, with cursor and other interface techniques, combined, bring out new inventive concepts which are not set forth in the prior art of record.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven P Sax whose telephone number is 703-305-9582. The examiner can normally be reached on M-F 8:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid can be reached on 703-308-0640. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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